

AMENDMENTS TO THE SPECIFICATION:

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/EP 2004/052724 filed on October 29, 2004.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0001] with the following amended paragraph:

[0001] Prior Art **Field of the Invention**

Please replace paragraph [0002] with the following amended paragraph:

[0002] The invention is ~~based on an~~ directed to an improved apparatus for and method of feeding fuel ~~and on a~~ method for pressure detection as generically defined by the ~~preambles to~~ claims 1 and 4, respectively from a tank to an internal combustion engine.

Please add the following new paragraph after paragraph [0002]:

[0002.5] Description of the Prior Art

Please replace paragraph [0003] with the following amended paragraph:

[0003] [[An]] One apparatus is ~~already~~ for feeding fuel to an internal combustion engine, known from German Patent Disclosure DE 100 43 688 A1, ~~having~~ has a feed pump, a pressure line leading from the feed pump to the engine, a check valve located in the pressure line downstream of the feed pump, and a pressure sensor communicating with the pressure line. The pressure line is provided on a so-called fuel distributor and detects the pressure in the fuel distributor and in the pressure line. For a so-called tank leak diagnosis, one additional pressure sensor in the tank is necessary, if a leak in the tank is to be detectable.

Applicant: Juergen GRAS et al.
Docket No. R.307336
Preliminary Amdt.

Please replace paragraph [0004] with the following amended paragraph:

[0004] **Advantages of the Invention**

SUMMARY AND ADVANTAGES OF THE INVENTION

Please replace paragraph [0005] with the following amended paragraph:

[0005] The apparatus of the invention and the method of the invention ~~as defined by the characteristics of the bodies of claims 1 and 3, respectively~~, have the advantage over the prior art that the production costs for the apparatus can be reduced in a simple way by providing that the pressure sensor is operatively connected to the pressure line downstream of the feed pump and upstream of the check valve.

Page 2, please delete paragraph [0006].

Page 3, please replace paragraph [0011] with the following amended paragraph:

[0011] In [[the]] an advantageous exemplary embodiment, in the pressure line leak diagnosis, it is concluded that there is a leak in the pressure line downstream of the check valve[[,] if the measurement signal of the pressure sensor drops below a predetermined value.

Please replace paragraph [0012] with the following amended paragraph:

[0012] **Drawing BRIEF DESCRIPTION OF THE DRAWING**

Please replace paragraph [0013] with the following amended paragraph:

[0013] One exemplary embodiment of the invention is ~~shown in simplified form in the drawing and described in further detail in the ensuing description~~ described fully herein

Applicant: Juergen GRAS et al.
Docket No. R.307336
Preliminary Amdt.

below, in conjunction with the single drawing figure which is a simplified schematic illustration of a fuel system according to the invention.

Please replace paragraph [0014] with the following amended paragraph:

[0014] ~~Description of the Exemplary Embodiment~~

DESCRIPTION OF THE PREFERRED EMBODIMENT

Please delete paragraph [0015].

Please replace paragraph [0016] with the following amended paragraph:

[0016] The apparatus of the invention has a tank 1, with a reservoir 2 located for instance in [[it]] **tank 1**, in which **reservoir** there is a feed pump 3 which aspirates fuel, stored in the tank 1, out of the reservoir 2 for instance via a prefilter 4 and an intake line 5 and pumps it with increased pressure via a pressure line 8, for instance to a fuel distributor 9 of an internal combustion engine 10.

Page 4, please replace paragraph [0018] with the following amended paragraph:

[0018] The reservoir 2 **provided** for example keeps enough fuel on hand that a supply of fuel to the engine 10 by the feed pump 3 is assured even if no fuel is pumped into the reservoir 2, **for short times** such as when the vehicle is cornering, causing sloshing of the fuel in the tank 1. The reservoir 2 is filled in a known way via a suction jet pump, not shown, that is supplied by the feed pump 3 and that pumps fuel out of the tank 1 into the reservoir 2.

Please replace paragraph [0022] with the following amended paragraph:

[0022] A check valve 16 is for instance located in the pressure line 8 downstream of the feed pump 3; it prevents a reverse flow of fuel from downstream of the check valve 16 to upstream

of the check valve 16 and in this way maintains the overpressure, built up by the feed pump 3 ~~in the pressure line 8~~, in the pressure line 8 downstream of the check valve 16, even after the feed pump 3 has been shut off. Downstream of the check valve 16, a main filter 17 is for instance provided, which filters out the fine dirt particles contained in the fuel. Downstream of the main filter 17, a branch line 18 branches off from the pressure line 8. The branch line 18 communicates with a pressure regulator 19, which opens at a pressure in the pressure line 8 that is greater than a predetermined opening pressure and causes fuel to flow out of the pressure line 8 back into the reservoir 2 via the branch line 18, the opened pressure regulator 19, and a return line 22. In this way, the pressure in the pressure line 8 is kept at a constant value.

Page 7, please replace paragraph [0031] with the following amended paragraph:

[0031] With the feed pump 3 switched on, the check valve 16 is opened, because of the pumping of fuel in the direction of the engine 10, so that the pressure in the pressure line 3 downstream of the feed pump 3 and upstream of the check valve 16, minus pressure losses [[of]] at the check valve 16 and the pressure line 8, corresponds to the pressure in the pressure line 8 downstream of the check valve 16 and the pressure in the fuel distributor 9. The pressure in the pressure line 8 downstream of the check valve 16 and the pressure in the fuel distributor 9 will be hereinafter referred to as the system pressure. Since the system pressure is the desired controlled variable, the engine controller 29 corrects the measurement signal of the pressure sensor 23 by the pressure loss, for instance [[of]] at the check valve 16, the main filter 17, and/or the pressure line 8, 9.

Applicant: Juergen GRAS et al.
Docket No. R.307336
Preliminary Amdt.

Page 9, please add the following new paragraph after paragraph [0034]:

[0035] The foregoing relates to a preferred exemplary embodiment of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.